MEASURING THE COST-EFFECTIVENESS OF FORECLOSURE PREVENTION COUNSELING

by

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The need for this study

Background

In 1995, the Clinton administration announced a goal of obtaining a homeownership rate of 67.5% by the year 2001. While this was only an increase of around 1% over the existing rate, it meant an increase of hundreds of thousands of additional homeowners. Most people with the financial means and interest in homeownership had already purchased a home. Therefore, new homeowners would have to be low and moderate-income renters who had typically been unable to afford a home.

This was one of a series of policy choices by many different actors in the mortgage industry. Congressional acts have stimulated lending to low and moderate-income populations. In 1977, Congress passed the Community Reinvestment Act (CRA) to encourage financial institutions to lend to these populations. The Home Mortgage Disclosure Act of 1989 (HMDA) amended the CRA act, forcing financial institutions to report their lending practices and opening them to public scrutiny.

Furthermore, the federal government has long provided incentives for homeownership. The home mortgage interest deduction and the property tax deduction are by far the largest housing subsidies of the federal government. They have been credited for creating wealth for generations of citizens and enlarging the middle-class. The U.S. Department of Housing and Urban Development (HUD) has had a program called Federal Housing Administration (FHA) that subsidizes mortgage loans by providing full insurance on the lender losses on these loans, which creates a market for private entities to lend to lower-income persons. The Veterans Administration has a similar mortgage insurance program for war veterans.

Government Sponsored Enterprises (GSE) increased their goals of purchasing loans made to low and moderate-income populations throughout the 1990's. The largest GSEs are Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac"). The 1992 Federal Housing Enterprise and Financial Safety and Soundness Act created a more ambitious plan for the Fannie Mae and Freddie Mac to buy loans aimed at lower-income homeowners. In addition to this, GSEs have purchased more of these loans because of the increase of these loans available as a result of CRA and HMDA. Also, a 1995 HUD requirement sets targets for GSEs to purchase more loans targeted to low and moderate-income populations. These actions have a strong impact on the lending industry. Because most loans are sold to the secondary market, GSEs loan purchasing patterns have a strong impact on the origination of affordable loans.

Adding these policy changes to the growing economy of the 1990's, a substantial increase in homeownership resulted, especially an expansion in homeownership in lower-income populations (McCarthy and Quercia 2000). The rate of homeownership increased from 66.8% for the third quarter of 1995 to 68% during the third quarter of 2002. An increase in minority homeownership helped boost this figure.

To serve these lower-income populations, most lenders loosened their underwriting standards to lend funds in this new market. However, in the past, perceptions of higher default rates and greater risk meant most lenders ignored this "sub-prime" market. Lenders would expect that lending to these new markets would result in higher delinquency, default, and foreclosure rates.

Indeed, national statistics indicate that foreclosures are a growing problem. For all mortgage types, the foreclosure rate for the third quarter of 2002 were 1.15%, the highest ever (Collins 2003.) Typically the foreclosure rate of sub-prime, subsidized, and adjustable rate mortgages is even higher (GAO 2002). This is due in part to the ability of a lender to cover its costs in foreclosure through the Federal Housing Administration (FHA) mortgage insurance, but may also reveal the increased risk of loans made to low and moderate-income persons.

There is evidence of a crisis in default and foreclosure on a regional and neighborhood level. California has significantly higher rates of default than the nation at large. Also, there are higher foreclosure rates on adjustable rate mortgages (GAO 2002). Chicago may have experienced foreclosures at a rate as high as 4.7% at the end of 2002, and this rate is even higher in many of its neighborhoods (Collins 2003). With the economic slowdown of recent years, there is concern that these rates will rise even more.

The importance of new research

There is anecdotal evidence that foreclosure prevention counseling is effective in preventing foreclosures with troubled borrowers. Given the slowing economy, the increase of loans to lower-income borrowers with less secure credit, and a general desire to sustain the achievement of the increase in homeownership, foreclosure prevention counseling (FPC) may play a more significant role in non-profit organizations in the future.

New research on the effectiveness and cost-effectiveness of FPC is important to all stakeholders for multiple reasons. First, it would help these stakeholders decide if FPC should be an important part of loan workout plans and non-profit housing programs. It could show that FPC could be an additional loss mitigation approach to the mortgage industry, providing the personal service that new technological advances cannot achieve. It may improve the cost-effectiveness of existing programs. Second, it will help identify who benefits and pays the most in foreclosures, and thereby identify who should pay the costs of these programs. Thirdly, it may help identify what elements and variables lead to successful FPC. Most importantly, it may lead to reduced foreclosures, which would have an overall positive impact on the economy and benefit all stakeholders.

While there are many stakeholders who incur costs in foreclosure, including the borrowers themselves, governments at different levels, and neighbors of the foreclosed property, this analysis will focus on the costs to the private mortgage industry, such as the lender, the private mortgage insurer, the servicer, and the secondary market investors. The purpose of this analysis is to understand and advance the current knowledge of the cost effectiveness of foreclosure prevention counseling. It also will attempt to determine the extent to which the private mortgage industry should contribute to non-profit FPC programs and the ability of current research to convince the private mortgage industry to provide this funding.

Definitions of key terms

Throughout this document, a number of terms are used. Foreclosure prevention counseling refers to the work a non-profit organization does to prevent borrowers from involuntarily losing their homes. Lenders are considered loan originators, who usually will sell their loan to investors. These investors are Government Sponsored Enterprises, such as Fannie Mae and Freddie Mac. Servicers are for-profit organizations that "collect mortgage payments from borrowers and disburse those payments to lenders, local governments, and insurers" (Cordell and Cutts 2002). Private mortgage insurers are companies that insure a portion of the loan, typically the first 20-25% of the loan value.

Background on the foreclosure problem and foreclosure prevention counseling

Foreclosures defined and its consequences to stakeholders

Foreclosure is the "involuntarily relinquishing of rights to a property due to the inability to maintain financial obligations involved with homeownership" (Capone 1996). Only a small percentage of mortgage loans ever face foreclosure, but they represent the extreme cases of borrowers' financial hardship.

Foreclosures are extremely costly to all the stakeholders of a mortgage loan. A borrower's decision to default on its mortgage loan is determined in part by the costs that a foreclosure will have on the borrowers financial future. The biggest loss may be the loss of equity in the residence. Other costs include finding a new residence, damage to credit rating for up to 10 years, and possible psychological trauma (Capone 1996). Lenders have an interest in preserving their loan assets and interest revenues. Servicers want continued revenue from servicing the accounts. Mortgage insurers, either public or private, face large insurance claims in foreclosures. Local governments face the loss of tax revenues and often the deterioration of neighborhoods. Owners of property near a foreclosed home often face a drop in their property values. Non-profit organizations have an interest in serving people in need and their neighborhoods. For example, Minneapolis's Mortgage Foreclosure Prevention Program states as two of its goals "to stabilize neighborhoods by preventing vacant and boarded houses" and "to save public and private dollars by preventing foreclosure-related losses" (Moreno 1998).

Recognizing these costs, the mortgage banking industry has designed a number of programs in an effort to reduce foreclosures. The term for this the industry is called "loss mitigation." These programs provide servicers with a number of options to assist a defaulted borrower in avoiding foreclosure.

There are two types of loss mitigation approaches to a defaulted loan. One involves reinstating the loan, where the borrower and the servicer create an agreement to keep the borrower in the house. The servicers will alter the terms of the loan so a borrower can restart payments. There are myriad ways that is done. One approach is forbearance, which suspends payments over a period of time. This allows borrowers to solve other problems and begin repayment on a loan when their troubles have ceased. These payments, both interest and principal are usually folded into principal and repaid over the term of the loan. Another method is loan restructuring. This may mean lowering the monthly payment but extending the loan over a longer period of time, or it may mean reducing the interest rate. If the loan is an FHA loan, the loan may be eligible for a partial claim workout. The FHA will give the lender the amount necessary to cure the default and will execute a promissory note with the borrower for this amount. Payments on this loan may be deferred and may carry zero interest (Cordell and Cutts 2002).

In the event of a default and extreme borrower hardship, some borrowers may not qualify for loan reinstatement and so may be unable to keep their homes. Historically, foreclosure was a lender's primary method of reducing its losses in these situations. There are now other options instead of a foreclosure that can allow borrowers to relinquish their homes yet preserve some of their credit rating and reducing costs for the mortgage industry. The first method is called a "deed in lieu." This means that a borrower will "turn over the keys", or transfer the title, to a lender in exchange for a release from the obligations under the mortgage. The other method is a pre-foreclosure sale, where a borrower agrees to sell the house and pay off the mortgage and payments in arrears from the sale proceeds. Although these options are not available in every situation, both of these methods are more commonly used now than ever before (Capone 1996).

Because few loan originators keep loans in their portfolios, secondary market policies have a significant effect on underwriting and granting mortgage loans. The secondary market for mortgages places restrictions on restructuring loans that they keep in their portfolio. Even though the secondary market has loosened restrictions on this in recent years, this still may provide limits on workout options.

In recent years, technology has helped the mortgage industry reduce the number of foreclosures. Over the last 20 years, loan servicers have developed and used computer software that performs an analysis of a borrower's situation and evaluates factors such as payment history, credit ratings, and borrower financial situation. These programs have proven successful in helping servicers and lenders to measure the risk of default, provide a framework to determine workout options, and determine a collection strategy (Cordell and Cutts 2002). These technological innovations in the industry have reduced the number of foreclosures among their defaulted loans. However, despite this reduction, the foreclosure rate continues to rise.

Foreclosure Prevention Counseling by Non-Profit Organizations

One additional resource to the stakeholders in a defaulted loan is foreclosure prevention programs. Often, a lender will grant forbearance if a troubled borrower enters this counseling (Quercia et al. 1998). This counseling provides individualized help from a person who wants to help and who usually does not have a financial stake in the loan. A borrower in trouble may feel more comfortable talking to a counselor than a bank representative. Also, as lenders used looser underwriting standards in their affordable housing lending, they used foreclosure prevention counseling to offset some of this risk (Quercia et al. 1998, Bunce 2002).

Most post-purchase counseling starts when the borrower is in default (Wallach 2001). It is also offered across a variety of entities with much fragmentation (Moreno 1994). Formal training is relatively infrequent, with more resources going towards pre-purchase counseling (Quercia and Wachter 1996).

Table 1 lists the elements of foreclosure prevention counseling. Individual counseling is the primary method of assistance, either by phone or in person. This aims to help borrowers understand their situation, to ensure that they understand and respond to bank correspondence, and to help them budget their expenses to continue making payments. Counseling can affect the default decision by helping the borrower understand these costs. It may also help homebuyers learn to make better decisions with their money, and to keep making payments in the event of a crisis (Quercia and Wachter 1996).

Anecdotal evidence shows the success of post-purchase counseling if it starts early. For clients with whom they could intervene early, the Mortgage Foreclosure Prevention Program in Minneapolis and Saint Paul, Minnesota, was able to prevent foreclosure in half of the homeowners they counseled (Moreno 1998). If a borrower waits too long to seek help, counselors may be unable to provide the assistance the borrower needs before foreclosure proceedings are completed.

Often, a major role of a counselor is to serve as an intermediary between the borrower and lender (Quercia et al. 1998). They also will refer borrowers to other services they may need to manage their finances or life circumstances. Common partners include legal services and credit counseling agencies.

Table 1: Elements In Foreclosure Prevention Counseling

1. Counseling
   - Detecting delinquency early
   - Ensuring that households respond to notices
   - Assessing reasons for delinquency
   - Managing the crisis
   - Managing finances
2. Budgeting
   - Providing financial training
   - Prioritizing spending
3. Advocacy
   - Participating in and supporting client's negotiations with lender/servicer
4. Financial Assistance
   - Providing financial assistance to make mortgage payments or meet other financial emergencies
5. Referral Network
   - Providing referrals to organizations that can provide assistance to households in dealing with issues that contribute to delinquency

From: Federal Reserve Bank of Philadelphia. *Home Ownership Education and Counseling* (2001)

Many programs include financial assistance to help the borrower make payments in emergency situations. These may include making a few payments for the borrower from a revolving fund, providing "silent" second mortgages, or granting new, lower interest rate loans to payoff the previous loan (Quercia and Wachter 1996).

Unlike pre-purchase homeownership counseling, there are no standards for foreclosure prevention counseling. These programs vary widely in content, focus, intensity, and duration (Quercia and Wachter 1996).

Who pays for foreclosure prevention counseling programs

Formal HUD funding for FPC programs began in 1968 with the formation of HUD. Until 1977, post-purchase counseling—which includes FPC—was the focus of the industry because of high foreclosure rates in HUD's homeownership programs. HUD began funding non-profit organizations to provide counseling in 1974 (McCarthy and Quercia 2000). This funding continues today—for fiscal 2002, HUD appropriated $20 million for Homeownership Education and Counseling (HEC). In addition to HUD, private foundations and non-profits, and other governmental sources provide funds for foreclosure prevention counseling. Few in the private mortgage industry contribute substantially to these programs, but many refer their troubled borrowers for counseling.

A critical evaluation of past studies

Analyzing past studies

Critical study issues

A number of organizations have been trying to perform a conclusive study on the cost-effectiveness of FPC programs. These efforts span thirty years, with a large number of studies performed between 1970 and 1980. These studies, however, are flawed or not sufficiently comprehensive in scope to convince many stakeholders of counseling's cost-effectiveness.

Table 2 lists a number of critical issues in the creation of a thorough empirical study of the cost-effectiveness of FPC programs. One problem is creating a standard definition for success based on the goals for their program. Most studies define counseling success as preventing a foreclosure on a home that would have otherwise happened if not for counseling. However, in some cases, borrowers may prefer to give up their house, or counseling may focus on prosecuting a lender that used illegal lending practices.

Another critical element is isolating the effects of FPC on a borrower's ability to cure. Counseling is always just one reason why a borrower cures. It is often likely that an improvement in a borrower's circumstances is the primary reason for a cure—for example, the borrower is able to find a job or is able to return to work after an illness. Furthermore, offering financial assistance to a borrower may reduce the need for counseling. In the Mortgage Foreclosure Prevention Collaborative study, 95% of all borrowers who received financial assistance avoided foreclosure (MFPC 1994).

Not only is isolating these problems difficult, but controlling for and identifying these other factors may also be challenging. Factors such as a person's temperament or the willingness of a family member to help may be hard to measure, identify, and record in a data set. Using a multi-variate statistical analysis will have to include many factors that reflect other reasons for default, such as job history and income level. Identifying the most critical variable may be difficult. A random sample of participants may control against this, although it would be difficult to implement (Quercia and Wachter 1996).

One recurring problem in the literature is the identification of an adequate control group. Controlling for the above factors that influence a default decision, borrowers need to fall into two categories for comparison. Many studies have compared borrowers who were referred for counseling versus those who were not referred, and then differentiating referred borrowers between those who were counseled or not. Some of the studies listed below show the problems with this method. However, this method was the only option for these studies because of available data.

How a counseling agency determines who will get counseling may vary from provider to provider. The borrower's willingness to participate is a significant issue. There may be differences in effort to avoid foreclosure under voluntary versus involuntary counseling programs. Also, many counseling agencies screen potential clients so they can target their resources to particular persons. For example, agencies may allow anyone to receive their services, or they may have a triage strategy, only helping the borrowers they think they can help. Some providers, whose organization may originate or service loans, may only provide counseling for their own customers, while other may only counsel HUD-referred borrowers.

Because there are no standards for counseling in foreclosure prevention, there is wide variation in counseling methods. These methods may vary by site-to-site and even from one counseled borrower to the next. Programs may vary in their use printed materials, the number of hours of counseling provided, the ability to provide financial assistance, and the number of counselors on staff. One counseling provider may provide counseling by telephone and may counsel borrowers from different states, while another borrower may only provide face-to-face counseling. Most programs provide counseling in both ways.

Table 2: Critical problems in methodologies for measuring the success of homeownership counseling

Problem	**Problem Description**	**Sources**
Creating a firm definition of success	There are different goals for counseling, so it may be difficult to measure success. Most studies define counseling success as preventing a foreclosure on a home that would have otherwise happened if not for counseling.	Mallach 2001
Isolating counseling from other effects	Ideally a study would like to determine that counseling was the single factor the helped prevent the default/foreclosure. If this is not possible, identifying the degree to which counseling help may be useful.	HUD 1983
Controlling for and identifying exogenous factors	Because so many factors influence a borrower's ability to cure a default, such as an employment situation and ability to receive financial assistance, it is difficult to identify which factors should be included as control factors. Furthermore, some of these factors may be difficult to identify.	Abt proposal 1998, Mallach 2001
Identifying a control group	Ideally, two otherwise identical groups would be created: one who receives counseling and one who does not. This may not ethically plausible. Using quasi-experimental research designs may be easier to implement but the results may be less convincing.	HUD 1983, Quercia and Wachter 1996, Mallach 2001
Identifying who participates in counseling	If the program is purely voluntary, then there will be selection bias in the data. If it is compulsory, then many borrowers may be unwilling to use the help they receive. Also, many counseling agencies screen potential counselees, perhaps focusing on the most needy or the ones mostly likely to benefit from help. Another key difference is face-to-face counseling versus telephone counseling.	HUD 1983
Comparing the methods of each program	Because there is so much variation in the type, methods, scope, and quality of foreclosure prevention counseling, it may be difficult to compare results across agencies.	HUD 1983
Comparing the qualifications and skills of the counselor	Even if counseling agencies had similar methods and financial resources, there are many qualities of the counselor that are critical elements to the success of counseling. These include a counselor's education, people skills, accessibility to client, and number of professional contacts.	Quercia and Wachter 1996
Obtaining needed data	There have been legal and methodological difficulties in past research to link lender/servicer data on troubled accounts with data on counseling for the owners of these accounts. Data on many important factors may not be available.	HUD 1983, Quercia and Wachter 1996, Mallach 2001
Using a proper time period	Many foreclosures can be prevented in the short-term but a few years later borrowers face troubles again. The study needs to monitor the success of counseling over several years.	Abt proposal 1998, Mallach 2001
Obtaining an adequate sample size	Given the possible variations given above, a large sample size is needed to provide significant results for all variables.	Abt proposal 1998

A related issue is the competence of the counselor. Counselors vary in education, training, available time, relationship skills, and professional connections. Some of these qualities are difficult to measure. All of these factors will influence the counselor's ability to assist the troubled borrower. The competence variable may vary from site to site, counselor to counselor, and from borrower to borrower.

Data collection has been one of the biggest reasons for the limited reliability and generalizability of past studies. There are few data sources that include data that combines both counseling and account history, so these data must be collected from different sources and linked together. A study attempted by the American Homeowner Education and Counseling Institute (AHECI) reveals strong legal challenges to releasing borrower information. Furthermore, many data are difficult to quantify but are critical in determining the efficacy of counseling. Also, due to the cost, time, and expertise required to maintain a database, many non-profit providers do not collect data on their counseling efforts. When they do, these data may be incomplete or poorly maintained. Lenders may also be unwilling to share data on their customers and their lending practices for business reasons. As a result of these issues, past data will unlikely be adequate to perform a thoroughly rigorous study of counseling, so new data will need to be created before a study can be performed (Quercia and Wachter 1996).

Many past studies fail to examine counseling results over a long enough time period. Many studies show that most foreclosures occur within three to five years after loan origination (Quercia and Wachter 1996). Evidence also shows that many borrowers, even if they can stave off foreclosure once, face trouble again several years later (FPC 1994, Moreno 1995). A long-term horizon is needed to determine if counseling is successful.

One last problem is obtaining a sufficient sample size. Because there are so many variables in measuring counseling success, obtaining a sufficiently large sample to control for all of these is important. However, many counseling agencies do not counsel a large number of persons, so obtaining a sufficiently large sample may be difficult.

Studies performed before 1983

A 1983 HUD publication, *A Report to Congress on Housing Counseling*, describes and summarizes over a decade of studies on the issue. The report's conclusion states that results of these studies are mixed on the effectiveness of FPC. In general, the studies show problems in ways listed above. The data and methodologies of some of these studies raised questions about the reliability and generalizability of these results (HUD 1983). As a whole, these reports are inconclusive due to their limited scope and numerous flaws.

The first study was performed by the Organization for Social and Technical Innovation (OSTI) in 1974. It evaluated delinquent borrowers in the Section 235 and 237 programs from 31 agencies nationwide. It found that counseling had a modest effect on avoiding mortgage failures, and these results varied widely by program and city. A major weakness of this study is that it compared defaulted borrowers in cities with counseling programs versus those cities without counseling—it did not consider many of the variables listed above, such as socio-economic factors and counseling methods, to accurately compare these programs. Data collection problems also taint the reliability of this study (HUD 1983).

HUD tried to improve on the OSTI study in a study called *Counseling for Delinquent Mortgagors* in 1975. This study compared referred and non-referred borrowers, and, of those that were referred, counseled and non-counseled. It tried to incorporate socio-economic data. It found that troubled borrowers who were referred to a HUD-sponsored counseling program faced foreclosure at a rate of 16% less often than those who were not referred.

The results of the cost-benefit analysis showed that counseling was cost-effective for HUD. The data used for this study was the same as the OSTI study; again, data reliability raises questions about the results (HUD 1983).

Two years later, HUD released another study, *Counseling for Delinquent Mortgagors II*, which, despite its name, is unrelated to the former study. It attempted to correct some of the data problems of the first in several ways, most notably by creating control groups within the same city. It found that referred borrowers experienced fewer foreclosures than non-referred borrowers, like the previous study. Results also showed that, among the referred borrowers, those who received counseling had similar rates of foreclosure to those who did not receive it. Success varied widely by city and program. Because of data restrictions, the results cannot be generalized beyond the 5 cities studied (HUD 1983).

In 1980, the National Urban League's study, called *Report of Home Mortgage Assignment Counseling*, found that counseling had mixed results, even finding that some groups of borrowers who received counseling had a greater rate of foreclosure than those who did not. They surmised that only the most desperate cases were referred for counseling, although the foreclosure rates decreased the longer the borrowers remained in counseling. The study did indicate that, overall, the program was cost effective for HUD (HUD 1983). The study had a litany of methodological problems, including not controlling for large difference in programs in different cities and using a short time frame. Furthermore, changes in the HUD program over the study period were not reflected in the study methods.

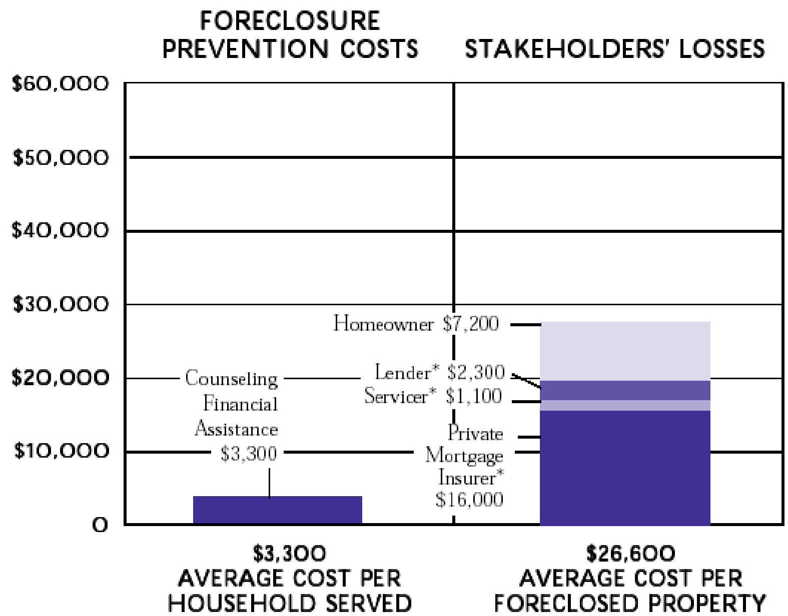
Lastly, a 1980 study focused on default counseling in Detroit. Results showed that in Detroit foreclosure rates were higher for counseled borrowers. Default rates were about the same for both groups. They did not attempt to measure the programs cost-effectiveness (HUD 1983). Problems with the study included large gaps of missing data and the lack of randomness in sampling.

A recent study

The only study attempted to measure the success and cost-effectiveness of FPC in the last twenty years was performed by Ana Moreno for the Mortgage Foreclosure Prevention Program in Minneapolis and Saint Paul, Minnesota. This study found that FPC was cost-effective for all stakeholders in the aggregate (See Figure 1). The study used two scenarios that could have happened in a foreclosure. The first measured the costs of a foreclosure where the house was sold and the mortgage had private mortgage insurance. The second scenario had a FHA insured mortgage that was not resold and instead abandoned, leaving the care of the property to the city. Total mortgage foreclosure costs under the first scenario were $26,600 and $73,300 under the second. The cost of counseling per household served was calculated at $3,300, which includes the costs of providing both counseling services and financial assistance. See Figures 1 and 2 for the results of this study. The study recommends mortgage lenders provide more funding to foreclosure prevention counseling programs to benefit their customers (Moreno 1995).

The first scenario is the most typical for the private mortgage industry as a whole, but for loans to low- and moderate-income persons, many are insured through government insurance programs such as FHA and the Veteran's Association (VA). In the first scenario, aggregate costs to all stakeholders are much less than the costs of the counseling assistance—the total lender and servicer cost was only $2,300 per foreclosure, less than the $3,300 cost per successful counseling effort. Therefore, it makes little sense for these companies to pay for FPC themselves. Unless all stakeholders pay their share of funding foreclosure prevention programs, lenders have little incentive to pay for their share of the costs. The study suggests that if all stakeholders contributed in proportion to the total cost, all stakeholders would benefit.

Figure 1: Costs of foreclosure - privately insured, with resale of property



Source: Ana Moreno. *Cost Effectiveness of Mortgage Foreclosure Prevention*, 1995.

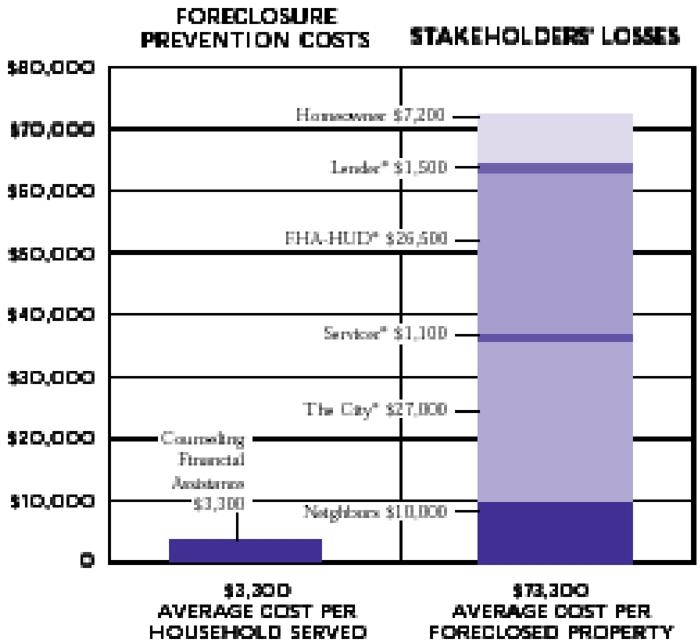
There are several other limitations on this study. The $3,300 cost was based on short-term results of preventing a foreclosure. Nearly half of counseled borrowers who avoided foreclosure faced it again within two years. Using the number of borrowers who avoided foreclosures over two years, the costs per successful counseling effort were $6,500, nearly twice the short-term amount. Using a long-term approach proves a better measure of counseling success, so this higher figure is more accurate.

The study assumed that counseling was the main reason that everyone avoided foreclosure. Many of the HUD studies above indicated that counseling was only one reason for curing a default. This study did not have a control group to isolate the effectiveness of counseling alone, nor did it consider other socio-economic factors. If, conservatively, counseling was the primary reason for the prevention of 50% of the foreclosures over two years, then the cost per prevented foreclosure was $13,000. This is significantly higher than the lenders costs—yet still well below the aggregate costs.

The data used to calculate the costs of stakeholders and the costs of the counseling program were not linked. Therefore, the study does not determine if these foreclosure costs would be the actual costs to foreclose on these troubled borrowers. The assumption that these troubled borrowers would face these foreclosure costs is conjecture.

This study only examined one counseling program. As described above, there are many variances in this counseling across programs and cities, so these results cannot be generalized beyond this one program in Minneapolis/St. Paul.

Figure 2: Costs of foreclosure with FHA insurance, no sale and property abandoned



Source: Ana Moreno. *Cost Effectiveness of Mortgage Foreclosure Prevention*, 1995.

Devising a methodology for the study of the cost-effectiveness of foreclosure prevention counseling

Creating a methodology

Because of the weaknesses of past studies and the importance of this issue, new studies are needed to properly evaluate the cost-effectiveness of foreclosure prevention counseling. Based on an evaluation of past studies, a review of the existing literature, and an understanding of research design, a far-reaching, comprehensive method is essential to get persuasive results.

A critical element of a new study would be to create firm definitions and measures for the critical variables, grounded in observation and the literature. There are two sides to this study. One is examining the counseling efforts at the counseling provider. The other is examining the lender's loan activity and collection efforts.

From the counseling provider perspective, these organizations attempt to prevent foreclosures while using their resources efficiently and wisely. Therefore, a study should measure the counseling provider's ability to prevent foreclosures and the cost associated with a prevented foreclosure.

The lender is usually interested in preventing a foreclosure because the foreclosure costs are usually very high. Providing a good calculation of these costs, especially considering the borrower's circumstances, is critical in the effectiveness determination. Furthermore, determining and measuring the lender's approach to mitigating losses is important as well.

Measuring a counseling provider's costs of preventing a foreclosure

Creating a measure for the cost of preventing a foreclosure

There are two variables to determine the costs of a foreclosure prevention program. One is identifying the actual expenses of the program. This may be one of the more straightforward parts of this study. See Table 3 for a list of these costs. The costs of staff time, materials, marketing, and outside resources are the primary expenses. If a program has funds specifically designated for FPC, and these funds are used exclusively for FPC, the study may simply take these total costs and divide them by the number of "successful" counselees to determine the cost. In other cases, where counseling costs are paid from other restricted funds, a more specific itemization of costs will be necessary (See Table 3.)

Table 3: Costs of foreclosure prevention counseling

Type of cost	Proposed measure	Comments
Costs of staff time	Use salaries of staff time and how much time they allocate to foreclosure prevention counseling	These costs needed to be adjusted for inflation and regional differences
Cost of facilities and overhead	Use actual expenses, allocated by time (such as phone) or square feet (facility space)	These costs needed to be adjusted for inflation and regional differences
Costs of management time	Determine how much time they allocate to foreclosure prevention counseling	These costs needed to be adjusted for inflation and regional differences
Costs of materials and speakers	Use actual expenses	These costs needed to be adjusted for inflation and regional differences
Promotion and marketing costs	Use actual expenses	These costs needed to be adjusted for inflation and regional differences
Opportunity cost of not using these funds for other purposes	None – probably will be unable to evaluate.	For funds used for counseling that are unrestricted, the opportunity cost of not using these funds for other purposes in the organization is important

The second cost is the cost to estimate a prevented foreclosure for the program provider. However, this is more difficult in that it requires a definition of a successful counseling effort. This will require a strict definition of success. As described above, one critical measure is isolating the other effects that allow a delinquent borrower from avoiding foreclosure.

In the Moreno study cited above, a successful outcome was only a short-term result. It took the total program costs divided by the number of foreclosure it was able to prevent in the short-term. The program costs was significantly smaller using this measure than a longer-term measure, which found that many borrowers faced foreclosure again in a few years.

A long-term approach is essential. While there are clearly many benefit from preventing a foreclosure in the short-term, counseling seeks to produce long-term results—to prevent a foreclosure permanently. There are savings to all parties in the short-term, but in many cases these costs will increase for many stakeholders if there is simply a delay of a few years.

Measuring the costs of foreclosures to lenders/investors

Lender and investors in mortgage loans face numerous foreclosure costs. See table 4 for a list of these costs. The challenge with this study will be to provide a reliable estimate of the costs of a foreclosure, given a borrower's profile, even if the person avoids foreclosure. It is important to mention that in some instances, borrowers may avoid foreclosure proceedings by offering to relinquish the title to their home through a deed in lieu or pre-foreclosure sale, which may significantly reduce these costs below.

Table 4: Foreclosure costs for lenders/owners of loan (e.g. GSEs)

Type of cost	Cost	Comments
Legal	Lawyers' fees	This cost will be highest in judicial foreclosure states
Administrative	Costs of collections and staff time to initiate and manage foreclosure process	
Financial	Loss of accrued interest/principal after sale of property	Mortgage insurance, especially when the insurer is HUD through the VA or the FHA, will cover much of this cost. A delinquency judgment may reduce or eliminate this cost.
	Opportunity costs of delays in courts	This represents the cost of reinvesting the funds in another loan.
	Loss of interest revenue	This may be a benefit—if current interest rates are higher than the rate of the initial loan, the lender may profit from reloaning the funds
Property Related	Management of foreclosed property	Includes property management staff
	Repair and maintenance costs	Properties obtained through foreclosure often require significant repairs before the lender can resell them
	Property taxes and insurance	
	Administrative costs	
	Selling costs	These include closing costs, realtor fees, and in some states, a real estate transfer tax

The most significant factor in foreclosure costs for a lender is time. Generally, a lender will make every effort to foreclose and take hold of the property as quickly as possible. In times of a depressed housing market, the lender may decide to own and manage the property until housing prices increase. In each situation, time will have an effect on the costs. The effect of time is discussed under the description of each cost below.

Types of costs

Lost interest and principal is one cost to lenders. Not only do they lose these costs upon foreclosure, but also, with the passing of time during the foreclosure process, these costs accrue because they cannot re-lend these funds to someone who will pay timely. Prevailing interest rates also may affect costs. That is, lenders may lose money when they lend the proceeds of a foreclosure sale at a lower rate than that of the previous loan (or gain if interest rates have increased).

Lenders incur costs in owning the property. Often, once borrowers realize they will lose their house to foreclosure, they will cease performing needed maintenance on the house. Also, these properties may be vacant for months before the lender can obtain title. Therefore, repairs are usually required before the house can be resold. There are additional costs in managing the property, insurance and taxes, and selling costs. Selling costs may include a realtor commission and a real estate transfer tax in some locations. Of course, the longer the lender owns the property before a sale, the greater these costs.

There are a number of factors that affect the sale of the house. In a down economy, foreclosures may increase due to a loss of jobs, potentially causing a large number of foreclosures in certain neighborhoods or regions. In this case, the real estate market may become depressed and reduce the liquidity and the sale proceeds of properties obtained through foreclosure (Springer and Waller 1993). In most cases, properties are sold at foreclosure auctions, usually to private investors that specialize in rehabilitating and reselling these properties. A house that has faced foreclosure often faces a stigma in the marketplace, often discounting the sale by five percent. This reduces the price that these private investors are willing to bid at auction and therefore reduces the proceeds of the foreclosure sale. Therefore, houses usually do not sell at market value (Capone 1996).

Legal considerations

Foreclosure laws vary widely by state. While there are many variations, there are three differences in types of statutes and regulations that affect foreclosure costs. These differences are the legal method of transferring the title to the lender, the right to redeem, and existence of deficiency judgments. A study by Philips and Rosenblatt determined that these three changes in laws have a significant effect on the costs of a foreclosure. When foreclosure costs are lower, it may decrease a lender's willingness to risk a workout plan with a borrower; conversely, if costs are higher, the lender may be eager to pursue workout options to avoid foreclosure (Philips and Rosenblatt 1997).

Different states have different procedures to transfer the title to the lender. One is judicial and the other is "power of sale". Briefly, the judicial process requires court approval to take property of the house. In a "power of sale" system, a trustee takes possession of the title and sells it. Judicial processes take much longer than power of sale foreclosures because they must enter long court proceedings, thereby increasing the costs to lenders (Philips and Rosenblatt 1997).

In some states, a borrower has a "right of redemption" period. This gives the borrower a fixed amount of time after the initiation of the foreclosure proceedings to pay all the principal, accrued interest, and lender costs before a foreclosure can occur. This limit varies very widely by state and can be up to 180 days. Philips and Rosenblatt found that the longer this period, the greater the costs to the lender (Philips and Rosenblatt 1997.)

The existence of a deficiency judgment also affects a lender's costs. This judgment allows a lender the right to collect additional funds from the borrower's assets if the proceeds from the sale of the foreclosed property fail to the cover the remaining principal and accrued costs. Where this exists, borrowers have increased risk from foreclosure and may be less motivated to pursue a workout plan (Philips and Rosenblatt 1997).

Bankruptcy law creates another potential problem for lenders. Borrowers facing foreclosure may file for bankruptcy, which creates a stay on collection efforts, meaning that lenders must cease all collection efforts, including foreclosure proceedings, until the court gives its approval (Springer and Waller 1993).

Important study considerations

As mentioned earlier, getting an accurate measure of these costs may prove difficult. First, few lenders may be willing to provide all of these data for privacy and competitive reasons. Second, it may be difficult and time consuming to measure the costs of a defaulted loan if the borrower cures. For example, finding a sale price on a foreclosed property may require some analysis of the local real estate market. In addition, the study will have to control for the variations in foreclosure laws across different states.

The circumstances surrounding the loan may have a significant effect on their desire to pursue a loan workout. For example, if the borrower lives in a power of sale state with deficiency judgment, a lender may be more interested in pursuing foreclosure than for a borrower in a judicial foreclosure state and with a depressed research market. A rigorous, sound study will control for these factors. A study would also need to control for a change in the interest rates, as this also may have an effect on foreclosure trends.

There is a list of other borrower characteristics that will useful to collect. All of these factors are correlated with a borrower's ability to repay a loan over time. These include the initial loan-to-value ratio of the house, the rate of appreciation in house value, the age of house, the presence of second and third mortgages, among others (Elmer and Seelig 1998). While studies have not yet shown these to be causal variables in foreclosure but instead are merely correlated to foreclosure rates, these data will be collected if available to make a more complete and robust data set.

An expansion of study results

Expanding the Moreno study

Existing literature can provide a basis for expanding on the Moreno study described above, "Cost Effectiveness of Mortgage Foreclosure Prevention." The following discussion will attempt to improve on the shortcomings of Moreno's analysis in an attempt to better evaluate of counseling's cost-effectiveness. This analysis will expand upon Moreno's two scenarios. The first measured the costs of a foreclosure where the house was sold and the mortgage was privately insured and the second measured the costs of a house that was insured by the FHA but abandoned and not resold by the lender. The focus will be on private, for-profit interests in the mortgage industry, including lenders, servicers, private mortgage insurers, and secondary market investors. These will collectively be referred to as the lender for this analysis.

In the HUD report, "Providing Alternatives to Mortgage Foreclosure: A Report to Congress," the author delineates a typical lender's foreclosure costs. The study provides costs under three different assumptions based on the length of the holding period. As described above, time is the largest factor in the costs of a foreclosure to the lender. Differences in state law change this time variable, so using a delay similar to that of Minnesota's (where most of Moreno's data was collected) this study can estimate the costs of a foreclosure using the HUD model.

Unfortunately, the Moreno study fails to describe the lender's estimated costs of foreclosure in detail, so a direct evaluation of the study's assumptions cannot be performed. It does tell us the following facts: the average assessed market value of the house was $55,400, the average homeowner had lived in their house for seven years, the average housing payment was $552, and the average total of payments in arrears was $3000. It also states that the average holding period was 9 months before the sale.

However, the current analysis assumes that the costs due to losses in interest will be less now than in 1995, when the study was published, due to changes in market conditions. Also, the current analysis will assume that about $50 dollars of the housing payment was for utilities, insurance, and property taxes. Using those figures and assuming an 8% interest rate and a 95% loan-to-value ratio at origination, the original loan amount was $71,000 and the purchase price was approximately $75,000.

Moreno calculated the costs per successful counseling effort as $3,300 per effort. A successful counseling effort is defined a series of counseling sessions with a borrower who had defaulted on a mortgage, that resulted with the borrower avoiding foreclosure and reinstating the mortgage, and remained in the house for over two years afterwards. From the analysis earlier in this paper, however, a figure of $13,000 is more accurate because it includes both the long-term success and an allowance for other reasons for curing a default. In the following scenarios, this $13,000 figures is used for a comparison to lender foreclosure costs.

Scenario one – sale of property with private mortgage insurance

See exhibit 5 for the calculation of revised foreclosure costs based one of Moreno's scenarios—a default resulting in a foreclosure sale with private mortgage insurance. This schedule is adapted from the HUD model, which is a standard calculation that lenders and services use to estimate the cost of a foreclosure (Capone 1996). The table shows the assumptions that there was a decrease in assessed value of $6173 after the lender paid for repairs before sale. Furthermore, it shows that the principal balance was $6580 greater than the assessed value before repairs. These results may occur in the most depressed neighborhoods, in which many of the counseled borrowers in Moreno's study may reside.

The Moreno study, as shown in Figure 1 earlier in the document, foreclosure costs—for the private mortgage companies, including the lender, servicer, mortgage company, and secondary market investor—was approximately $19,300. The calculation in Table 5 shows costs of $16,976. The difference between the calculations in Table 5 and Moreno's study may be explained by lower interest rates. The calculations in Table 5 use conservative figures, such as showing depreciation in home value and a lower original loan balance. As Moreno notes, these figures do not include certain administrative and staff costs that lenders have, such as collections staff and real estate managers.

Scenario Two – FHA insured, no foreclosure sale, property is abandoned

Moreno's other scenario involves a sale that is insured through the FHA and becomes abandoned. The cost of a foreclosure in this scenario is approximately $73,300 to all the stakeholders in aggregate—much greater than the first scenario. A large number of loans in her study were insured through the FHA and the VA. The private mortgage industry loses less in this scenario because of generous federal FHA insurance claim payments. Again, the costs are not detailed in Moreno's study, but the reader may assume that the losses to lenders and the FHA are greater than the other scenario because repairs do not add value to the house because there is no sale (see table 5.)

Table 5: Scenario One - Calculation of Foreclosure Costs

Values at Loan Origination			
House Price	$	71,579	
Loan Amount (95% LTV)		68,000	
Values at Loan Default (7 years after origination)			
House Value		55,400	
Add: value added from repairs		10,000	
Less: Loan Amount (7%, 30 yr., fixed rate loan)		(61,980)	
Proceeds from Foreclosure Sale			**3,420**
Drop in home value from foreclosure sale		6,179	
Difference in mortgage and assessed value		(6,580)	
Expenses That Are Independent of Holding Period			
Property Rehabilitation (8% of full house value)	8.0%	5,232	
Attorney, Title, and Transfer Fees (3.2%)	3.2%	2,093	
Realty Commission on Final Sale (6%)	6.0%	3,924	
Contribution Toward Buyer Closing Costs (3%)	3.0%	1,962	
Total Cost		13,211	
Expenses during nine month holding period			
Payments in arrears (6 payments)		2,714	
Lost interest during period		3,235	
Property taxes, hazard insurance, and maintenance (0.21%/month)	0.21%	1,236	
Holding Period Costs		7,185	
Total Cost			20,396
Gain/(Loss) on Foreclosure			**(16,976)**

Source: Adapted from "Providing Alternatives to Mortgage Foreclosure", HUD 1996.

Table 6: Scenario Two – FHA insured, no sale

Values at Loan Origination			
House Price	$	71,579	
Loan Amount (95% LTV)		68,000	
Values at Loan Default (7 years after origination)			
House Value		-	
Add: value added from repairs		-	
Less: Loan Amount (7%, 30 yr., fixed rate loan)		(61,980)	
Proceeds from Foreclosure Sale			**(61,980)**
Drop in home value from foreclosure sale		71,579	
Difference in mortgage balance and assessed value		(61,980)	
Other expenses/benefits	**9**		
Payments in arrears (6 payments)		2,714	
Reimbursement on insurance (90% of loan balance)	90%	55,782	
Benefit from transferring property to city (accrued taxes)	0.21%	698.04	59,195
Gain/(Loss) on Foreclosure			**(2,786)**

A Third Scenario – Deed-in-lieu or foreclosure sale

A third scenario is needed. The literature states that there has been an increase in deed-in-lieu and pre-foreclosure sales. This option cuts the costs of the lender considerably and provides an alterative to foreclosure. See Table 7 for a calculation of these costs to the lender. These costs are significant less than in the other two scenarios. Of course, this option is not always available or desirable. A borrower has to agree to them and the market has to be strong enough for the property to sell.

Table 7: Scenario 3 - Lender losses in a pre-foreclosure sale

Values at Loan Origination		
House Price	$ 71,579	
Loan Amount (95% LTV)	68,000	
Values at Loan Default (7 years after origination)		
House Value	55,400	
Less: Loan Amount (7%, 30 yr., fixed rate loan)	(61,980)	
Proceeds from Foreclosure Sale		**(6,580)**
Drop in home value from foreclosure sale	16,179	
Difference in mortgage balance and assessed value	(6,580)	
Payments in arrears (6 payments)		(2,714)
Gain/(Loss) on Foreclosure		**(9,295)**

Analysis

These revised numbers present a less convincing case for the cost-effectiveness of FPC than Moreno's study. Both the cost per effective counseling effort and the costs of foreclosure are understated in the Moreno study. Under scenario one, the study shows that private industry would benefit if they paid for their own counseling program, in that the costs of the counseling would result in a reduction of foreclosures and its costs. However, under scenarios two and three, lenders would not benefit as much from contributing to FPC programs. Because of the FHA insurance, much of the private lender's costs are recovered through insurance claims. Scenario three shows that using the loss mitigation techniques of deed in lieu and pre-foreclosure sales, their costs are below the cost of counseling. In these scenarios, the lender would benefit by paying its pro-rata costs of the counseling in conjunction with the other stakeholders.

This analysis only reflects the costs to the private mortgage industry. Other costs, such as emotional pain to homeowners, family stress, costs to the city, and costs to their neighborhood, are all important. If the aggregate costs are considered, FPC may be cost-effective in most foreclosure situations. Much anecdotal evidence shows that FPC improves the lives of many borrowers and complements other supportive services for low- and moderate-income persons. This analysis does not attempt to show a failure of FPC or discourage the use of FPC. However, this study fails to convince private industry that they should bear some of the costs of FPC and focus less time and research on loss mitigation techniques.

Future research

The above analysis cannot overcome many of the shortcomings of Moreno's study, and more research is necessary to provide a more defensible analysis for the cost-effectiveness of FPC.

Ideally, a study that provided a long-term, comprehensive analysis of this issue would be the best solution. However, based on all the challenges that researchers would have to overcome, it is unlikely to happen soon.

The needed study would be extremely expensive, perhaps prohibitively so. It would require a long-term commitment of many players, including researchers, lenders/servicers, counselors, and counseling organizations. It would require a significant level of cooperation with lenders and servicers, but according to Mallach, there is little interest for lenders to support this type of research (Mallach 2001). There are no existing data sources that could provide all the data that this study requires. To get the most conclusive and best empirical results possible, a data set will need to be created before any analysis is done, and collaboration with lenders and servicers will be required to collect this data.

Given these challenges, a more modest study may provide useful results. A natural extension of this research is to do similar work on pre-purchase homeownership counseling to see if that has an effect on default and foreclosure through educating people on how to manage homeownership responsibilities, on determining if homeownership is the best decision for them, and avoiding loans that carry overly burdensome terms.

These analyses study measures the quantitative result of FPC. However, there are intangible results that also motivate non-profits to have these program, such as building self-esteem, increasing civic involvement, and improving family life skills (Mallach 2001). Measuring these more qualitative results would supplement the research of this study. Some results that could be quantified, such as the ability of homeowners to reduce their debt load or to implement better spending habits, could also be examined.

This study focuses on the lenders and investors in mortgage loans. A more exhaustive study that includes other stakeholders, including costs and benefits to mortgage insurers, the governments, neighborhoods, and the borrowers themselves would provide a broader understanding of the cost-effectiveness of FPC.

There are some costs and benefits that deserve a thorough analysis, yet should be beyond the scope of this study. One is an empirical evaluation on the cost of foreclosures on neighborhood property values. Studies such as these could provide a cost figure for some of the costs that are not measured in this study and make this analysis more robust.

There are other related issues that are beyond the scope of this study but that have a significant impact on foreclosures and foreclosure prevention. These include predatory lending; consumer credit policies; and race, age, and socio-economic biases in lending practice. Studies on how these impact the foreclosures and foreclosure prevention could add to this body of literature.

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